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ABSTRACT

This paper is an interim report of a three-year study to investigate the relationship between personality and social development and varying environmental experiences on low and lower-middle income black preschool children. The subjects are 40 black preschool children between the ages of three years nine months and four years four months, selected from seven day care centers and classified according to social status based on the educational and occupational status of their parents. The overall objectives of the study are to determine preschool behavioral correlates of personality variables which have been identified as having developmental significance in relation to academic achievements of black children, and to ascertain from parental interview and ecological data, major influences of the home and preschool environments which appear to be correlates and possible antecedents of black preschool behavior. A further major objective is to develop a preschool curriculum relevant to normative developmental behaviors of black children. The purpose of the curriculum is to enhance a more effective transition from the environment of the preschool child to the school environment of the larger society. Included in this report are a review of the recent literature, Year II data analysis and procedures, and an analysis and interpretation of data collected on four-year-old subjects. Summary findings of pilot studies are included and projections for Year III data collection, procedures, and analysis are outlined. (Author/BS)

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INTERIM PROGRESS REPORTS

YEAR II

ECOLOGICAL INFLUENCES ON PSYCHOSOCIAL DEVELOPMENT OF BLACK CHILDREN

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ABSTRACT

Ecological Influences on Psychosocial Development of Black Children

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The present paper is a preliminary report of a longitudinal investigation which is attempting to systematically explore the relationship between personality and social development and varying environmental experiences of low and lower-middle income black preschool children. The project was funded for a total of three years, and is being conducted in three major phases. The objectives of the investigation are (a) to determine preschool behavioral correlates of personality variables, which have been identified as having developmental significance in relation to academic achievements of black children, and (b) to ascertain from parental interview and ecological data major influences of the home and preschool environments which appear to be correlates and possible antecedents fo black preschool behavior. These variables will be the focus of the third year of the project for the development of a preschool curriculum to enhance the academic achievements of black children.

A sample of 40 four-year old children, with an additional 20 children included for attrition, were selected to participate in the investigation. The subjects were screened with the abbreviated version of the Stanford-Binet, L-M. Subjects who scored below 68 on these instruments were not included in the study. The subjects were then administered the following instruments: The Thomas Self Concept Value Test, Matching Familiar Figures Test, Toy Preference Test, Stephens-Dely's Reinforcement Contigency Interview, and Leifer-Roberts Response Hierarchy Instrument. These scales will be administered individually to the subjects at age four (testing stage I) and age five (testing stage II). Following each stage of testing, three 15 minute time samples of each subject's behavior will be collected on video records. The time samples include video recordings of the subjects in unstructured (free play) settings on different days in the day care centers. After all test and video data have been collected on each child, parents will be interviewed, and attitudes toward child-rearing, family structures, ecological assessment of home-neighborhood environment, will be obtained. Following the collection of interviews and ecological data, the video records will be coded for behavioral analysis. Data analysis and synthesis will lead up to development of a preschool curriculum, which will focus upon the adaptive behavior of black children in their immediate environment and in the wider society.

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with the assistance and skills of Pamela Hooten deligently and untirely finished the product. Additional help in this area were provided by Chalmer Marcus, Lois Holt and Lettie Giles.

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INTERIM PROGRESS REPORT YEAR II:
Ecological Influences on Psychosocial Development of Black Children
(OCD-90-C-259)

INTRODUCTION

The continuous interaction of the immediate ecological setting with the psychosocial development of children may require adaptive behaviors, which are functional or appropriate for the ecological conditions underwhich they evolved, yet often dysfunctional, or simply inadequate, under other conditions. This appears to be especially the situation of "disadvantaged" children (i.e., disadvantaged according to their racial and/or economic status), who exhibit in the opinion of many, remarkable competencies in their immediate surroundings which are often viewed as dysfunctional or inadequate when compared with the normative behaviors of middle class white children. Failure to recognize the inherent function of children's behaviors from non-middle class backgrounds has led to experimentations with massive intervention programs designed to change developmental patterns of "disadvantaged" children. This circular phenomenon, involving largely social scientists and policy-makers, has not been completely a failure, however. For example, the failure of such programs has served as a reaffirmation of the position of theorists (Labov, 1970; Cole and Bruner, 1971; and others) who view the behaviors of blacks as not inferior to whites, and believe that they are equally logical and effective methods of functioning, given the nature of their immediate environment. These theorists assert that the deficit model on which the programs were based was faulty and, therefore, contributed to the lack of success (Baratz and Baratz, 1970). Similarly, failure of earlier intervention programs has lent support to other theorists (Jensen, 1969; Herrnstein, 1971 and others) who argue that differences in competencies between black and white children can be explained genetically. Consequently the nature-nurture controversy has arisen again, with the issues appearing to be more popular than scientific.

The basic premise of the present investigation is that the behavior of the individual in a specific ecological setting should be assumed to be functional, if the behavior allows the individual an appropriate manner of coping in his environment. However, behaviors of blacks have often been viewed as inappropriate, and in fact related to their inability to assimilate into the larger society. An underlying assumption of the present study is that by viewing the problem of human effectiveness from an ecological orientation, it is possible to specify exact relationships between the functions, of varying social environments and the adaptive behaviors of the child. According to Kelly (1966), an ecological point of view focuses on both constancy and variability of individual behavior across settings, and attempts to define the specific conditions under which a person with one type of competence is effective in one situation but not in another. According to this view, children may be competent in one social setting yet incompetent in others.

Children of lower and lower-middle income black families are often shown to exhibit low competencies in comparison with middle-class white children because they are evaluated from the latter's perspective. Whereas little attention has been given to those aspects of the black culture which prepares the black child to function in that environment, identification of the variety of unique stimuli within the black environment could lead to the use of these stimuli in school curricula so that the transition of the Black child from his environment to the wider society would be enchanced.

Ecological observations involve examination of the external forces which impinge upon individual behavior. These forces, as Barker (1960) points out, function independently of the laws that governs the individual's behavior. However, the effect of the environment upon behavior may be direct or moderated by other variables. The ecological setting includes the immediate situation which actually contains the individual, e.g., home, school, playground, etc., and the supportive environment, in which the immediate situation is embedded (see also Bronfenbrenner, 1974). These environments may be examine in terms of three related dimensions: physical, social, and psychological. These comprise the ecological factors in the environments which impinge upon the behavior of the child. The manner in which the child's ecology interacts with the socialization process has observable behavioral consequences. Kelly (1966) has attempted to explain competence as it relates to the function of different social environments and the adaptive behavior of the individual. According to him, competence is often environmental specific and is not always generalizable to other environments.

Inkeles (1968) has indentified pressures operating within various ecological settings, different groups, and different subgroups, which influences the socialization process. These include (1) the expectations of the society, (2) personal pressures, and (3) variation in the socializee. The relationship between socialization variation and ecological setting is reciprocal. Young (1966), in examining minority socialization, has indicated a number of factors which in one way or another moderates socialization process and goals, e.g., geographical distribution (demographical characteristics), cultural influences, social status, and changes in the environment which are man-made. If one takes, for example, the concentration of blacks in rural areas and compare them with urban blacks, one finds a surprising degree of value conflict, which is accentuated by other factors, e.g., religion, regional differences, income, and education.

Thus, it is assumed in this study that the environment does interplay with development, and does have consequences for later development. However, to test this line of reasoning the relationship between ecological settings within the black community and the development of children's behaviors is being examined by relating environmental characteristics of the home and neighborhood to performance on personality-social measures and observed behaviors over a two-year period. A major objective of the present study is to devise a strategy for early childhood intervention involving the development of a curriculum relevant to normative developmental behaviors of black children, as compared with intervention strategies which attempt to foster middle class behaviors (Baratz and Baratz, 1970). The purpose of the curriculum will be to enhance a more effective transition from the black environment of the preschool child to the school environment of the larger society. It is expected that such a curriculum will be developed from data gathered in the present study. Other major objectives of the study include:

- the investigation of the physical and social environment of black children through the use of observational (video records) and interview methods;

- the investigation of the relationship between specific environmental conditions and the personality and social development of black children;
- the examination of the relationship between personality and development of black children, varying norms for performance; and
- the examination of the relationship between black children with extreme scores on personality-social measures and observed behaviors, long with environmental variables.

A more detailed discussion of the project's objectives is reported in Year 1 report, Mathis and Oyemade (Note 1).

This paper is an interim report of a three year study to investigate "Ecological Influences on Psychosocial Development of Black Children." Included in this report are a review of recent literature pertinent to the study, Year II data analysis and procedures, and an analysis and interpretation of data collected on four-year-old subjects. Additionally, summary findings of pilot studies are included. Finally, projections for Year III data collection, procedures, and analysis are outlined.

REVIEW OF PERTINENT LITERATURE

This study has focused on age differences (4 & 5 year olds), ethnic differences (Black subjects vs. normative data on white subjects), socioeconomic differences (lower middle vs. upper lower class children), environmental factors, childrearing correlates of interrelationships, and the behavioral indices of the dependent variables included in the study. Thus in this report, for each of the variables, self-concept, reflection-impulsivity, dependence-independence, aggression, sex-role identification,* and locus of control, the literature has been examined to formulate additional hypotheses for the present study. Inasmuch as there has been a paucity of research for some of the variables at the target age level, in some cases the results for children at other ages have been included.

Locus of Control

While locus of control (I-E) as a construct has been studied for a number of years (Rotter, 1966), it was not until recently that measurement techniques were devised which were suitable for younger children. The most widely used of these are the Stephens-Delys (1972) Reinforcement Contingency Interview (SDRI), the Norwicki and Duke Internality-Externality Scale (1974). Since the SDRI had been in existence longer it was selected for this study.

Stephens and Delys (1973) define locus of control as an expectancy about expectancy. That is, it is the subject's expectancy that his own behavior would change the probability that reinforcement might occur. Thus, the theoretically purest locus of control question might take this form "I have a___ per cent chance of the teacher liking me if I try to make her like me, and a___ per cent chance if I don't." The locus of control expectancy being the difference between the two probability statements. It was on the basis of this definition that the SDRI was developed.

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* These variables, aggression and sex-role indentification, are not included in the present report, but will be reviewed as part of the final report for Year II.

Due to its recent development, data regarding the reliability and validity of the SDRI is limited. Thus in formulating hypotheses regarding behavioral and environmental correlates of Internal-External control in preschool children, data from other tests have been employed.

Age, race, SES and sex differences

For most measures, results have shown that the amount of internality increases with age (Batel, 1972; Cohen, 1971; Gruen, et al., 1975; Lifschitz, 1975; Newhouse, 1974, Riedel, 1970; Tyler, 1975; Staats, 1974; Stephens-Delys, 1971 & 1972) and that white subjects give more internal reponses than other ethnic groups, such as Afro-Americans. Spanish speaking persons (Gruen, et al., 1975), and American Indians (Tyler and Holzinger, 1975). However, in the case of Afro-Americans it was found that this was only true for middle class subjects and not for lower class subjects (Show & Uhl, 1971; Stephens & Delys, 1973). With respect to class differences Gruen et al., (1974) and Show and Uhl (1971) found that affluent children made more internal responses than disadvantaged children. Sex differences in I-E have also been found. Newhouse (1974) observed that females were more accepting of blame for failure than males, while Staats (1975) found that males were more internal than females in three age groups (childhood, adolescence and old age).

Relation of locus of control to dependent variables

Waite (1971) found suggestive evidence, among 36 children from a university laboratory nursery school, of a relation of internal control scores to reflectivity on a reflectivity-impulsivity task; the predicted locus of control differences occurred only on the most difficult trials of the reflectivity task, but there was other evidence that the task was generally too easy for this population. Subsequently, the relationship was confirmed in a group of 69 middle-class nursery schoolers (Stephens, 1972b). Using other measures of I-E, similar relationships have been found. Finch (1975) and Montogomery and Finch (1975) reported externals of being more impulsive in their cognitive tempo. However, other investigators, McNary et al. (1975), and Finch et al.(1975), failed to obtain a significant relationship between the two variables.

In most studies I-E has not been found to be related to I-Q although it correlates significantly with academic achievement (Gruen et al. (1975), task independence (Battinelli and Weizman, 1973), and field dependence (McNary et al.(1975).

Relation of I-E to child rearing practices

Stephens and Delys (1973) report that preliminary evidence which indicate that very high interval scores may be the product of different parent-child interrelation experiences (e.g., experiences with coercive, perfectionistic, ambitious, achievement-oriented mothers) than moderately high internal control scores (which may be associated more with experiences with nurturant and nonrestrictive mothers). Loeb (1975) also found that high external scores on the Bialer Locus of Control Scale was associated with more directive parents. Furthermore, Lipchitz (1973) suggests that subjects given more freedom, i.e., in three different kibbutz movements, reported having more control over results.

Behavioral correlates of I-E

Parker (1971) found that internal control scores, as measured by the SDRI, in a group of 40 day care center boys, were directly related to performance on a mirror-tracing task, and internal control scores were also found to be directly related to performance on a discrimination learning task. Also employing the SDRI, McCann (1972) demonstrated that in a probability learning task, young and external children shared more "win-stay" and "lose-shift" strategy than did other children. In addition, the SDRI was the only locus of control test which discriminated as predicted among second graders in "open-class-rooms," Engelmann-Backer type "behavior modification," and traditional inner city school experiences (Stephens, 1971, & 1972).

With other measure, I-E has been found to be related to achievement with internals having better performance (Clifford et al., 1972; Gruen et al., 1975; Messer, 1972; Nowicki & Duke, 1975; Show & Uhl, 1971). However, Callman (1972) did not find it to be related to achievement in minority groups. Battinelli (1973) found that internals were more imitative when behavior is relevant to the task, but less internal when behavior was irrelevant. A negative correlation has been reported between role-taking task scores and externality (Deysach et al., 1975) and a positive correlation was found between internality and perception of classroom as competitive (Johnson et al., 1973). Furthermore, a positive relationship has been demonstrated between internality and popularity, ability to delay gratification and prejudice (Norwicki and Strickland, 1973), and glancing behavior and external scores (Peeble and Nakamura, 1973). Mischel et al., (1974) also observed that control over positive events, but not negative ones, were related as predicted to persistence in three separate situations where instrumental activity would result in positive outcome.

From such studies, one could hypothesize that internals would more actively partipate in classroom activities, and is supported by Wolgang (1973). Other questions to be examined in this study include: What is the relationship between locus of control and impulsivity in black preschool children? Are the differences between 4 and 5 year olds lower in middle-cla-s boys and girls in performances on the SDRI? What childrearing practices of Black mothers relate to performance on the SDRI? What behaviors are exhibited by internals and externals in the classroom environment?

Dependence-Independence

Dependent and independent behavior are important features of early childhood. Children will in some instances seek physical contact or attention, while under other circumstances they will prefer to be left alone or to complete a task unassisted. When the child seeks attentive and nurturant behavior from other persons, it is usually an indication of dependency. On the other hand, independence often suggest that certain positive features characterize a child's social behavior, such as initiative, self-assertion, unaided and effortful striving, in addition to infrequent attempts to gain nurturance from others. Independence then, is more than merely a lack of dependence, although it may appear as if they are bipolar concepts along the same dimension. Bell (1956 has demonstrated that they are only moderately related. Thus, when the two variables are rated, they are usually rated on separate scales.

Some writers have explicity distinguished between "instrumental" and "emotional" or affectional dependency (Heather, 1955; Kagan and Moss, 1962), and Sears et al., (1967) note that the two categories of dependency have different developmental histories. In the case of instrumental dependency, a person seeks help from someone else in order to reach a goal. The infant, for example, is dependent on the mother for food. On the other hand is emotional dependence in which the social responses of others are the goals of the behavior and not merely the means of reaching some other goal.

On studying independence and dependence, many investigators have focused on the changes in the form of the response that occurs, as the child develops, and in isolating the child-rearing and environmental antecedents of the behavior. However, in this project studies have been identified which are concerned with the relationship of the variables to other developmental constructs.

Age, race SES and sex differences

The relative stability of dependency behavior from childhood to adulthood has been assessed in a longitudinal study by Kagan and Moss (1960), who found a relatively stable degree of dependency for girls but no relationships between childhood and adult dependency for boys. As Kagan and Moss note, in the American culture dependency is clearly a feminine sex-typed behavior pattern, and the differential stability is probably due to the greater encouragement of dependency in females and the discouragement of these behaviors in males.

Heathers (1955) observed 2-year olds and 4-and 5-year olds in a nursery school situation and noted that changes occurred with age, both in the form of the dependent reponse and in the persons to whom the dependent response was directed. Clinging and affection - seeking decline with age, relative to attention or approval seeking. Similarly the object of dependency shifts with age; as the child matures, and emotional dependence on adults declines,while dependence on one's peers tends to increase.

As in the case of dependence, there is evidence that independent action changes with age; as the child grows older the frequency of independent behavior increase (Joel, 1936; Heather, 1955). Probably this shift is due to the decreased reinforcement that dependency behaviors elicit, combined with direct reward and encouragement for independent action.

There is a paucity of research on independency and dependency in the black child. Most studies have focused on the child training antecendents of dependence and independence in blacks, the results of which are contradictory. Some investigators hold that lower income parents do not stress independence (Bronfenbrenner, 1970; Winterbottem, 1958) while others have suggested that black and lower income families tend to give too much independence to their children, in that they are often given the responsibility of caring for the home and younger siblings at an early age (Lewis, 1957). To date, no satisfactory explanation of the two conflicting findings has been offered. What is needed is more data on the independent and dependent behaviors, the environmental conditions under which the child must adjust which fosters the development of the behaviors, and the resultant effects on the other behaviors of the child.

Baumrind (1972) suggests that if Black families are viewed by White norms, they are authoritarian, but that, unlike their White counterparts, the most authoritarian of these families produce the most self-assertive and independent girls.

Effects of childrearing on dependency and independence

Efforts to understand the effects of concurrent socialization practices on dependency have focused on certain global dimensions of parental behavior, particularly the warmth-hostility dimension and the permissiveness-restictiveness dimension. Other parental behaviors which have been addressed in relation to dependence-independence are childrearing anxiety, sex anxiety, inhibitory demands and discipline, responsible child-rearing orientation, physical punishment, dependency encouragement, democratic attitudes, feeding schedules, authoritatian control, punishment (vs. non-punishment), punitiveness, punishment orientation, general family adjustment, marital conflict, firm discipline, independence-achievement orientation, seclusiveness and involvement vs. laissez-faire attitudes (Maccoby and Masters, 1970).

Some of the findings with a respect to the impact of feeding schedules are:

1. High dependency toward teacher, girls only when dependency is measured with ratings not observation (Sears et al., 1953).
2. Low dependency, in boys only when child's dependency is measured by mother interview;for boys is significant but small (Sears et al., 1957).
3. No measure of dependency in either sex using observational measures (Sears et al., 1965).
4. High dependency in girls only (Smith, 1958).

Severe weaning is associated with:

1. High dependency on teacher when rating measures of dependency is used; no relationship with observational measures (Sears et al., 1953).
2. No aspect of dependency, dependency measured through mother's report (Sears et al., 1957).
3. Low touching and holding and being near, girls only observational measures. (Sears et al., 1965).
4. High total dependency, particularly negative-attention-seeking, boys only observational measures (Sears et al., 1965).

The research on the effect of warmth on the dependency of children preschool and early school age may be summarized as follows:

1. Maternal nurturance (defined as equivalent to warmth unrelated to child's dependency (r=-.09); boys were patients at a mental health clinic; age range 5-61 (Finey, 1961).
2. Maternal and paternal warmth (as determined from mother interview) unrelated to child's responsiveness to social reinforcement, second-and third-grade children (Cairns, 1962)
3. No relationship between maternal or paternal warmth and childhood dependency. Nonsignificant trend: parental warmth associated with autonomy in boys. (Mother and father interviews; preschool children) (Baumrind and Black, 1967).
4. Nonsignificant trend: rated dependency positively associated with parental "nurturance" (mother interview). Observed dependency positively related to nurturance in girls, negatively in boys preschool children) (Sears et al., 1953)
5. Maternal warmth unrelated to child's current dependency (both measured by mother interview), kindergarten age (Sears et al.,1957).
6. Maternal and paternal warmth unrelated to any measure of dependency. (Mother and father interview, preschool age.) Mothers who were not as warm in the mother-child interaction had sons who were low in dependency (r= -.56) (Sears et al., 1965).
7. Small but significant negative relationship between mother love and child's dependency in schools setting. Subjects fourth - fifth, and sixth-grade boys. Parents' characteristics measured with Bronfenbrenner's Parent Behavior Questionnaire; child characteristics assessed with Winder-Wiggins peer-nominations inventory (Siegelman, 1966).

8. Maternal warmth positively correlated with the child's independence during a mother-child interaction session (N=40, boys and girls of nursery-school age) (Hatfield et al., 1967).
9. Parental warmth associated with high dependency in pre-adolescent boys (Bandura, 1960).
10. Parental warmth associated with dependency and nonaggressiveness in adolescence (Bandura and Walters 1959.

There is evidence that dependency is associated not with warmth but with its polar opposite, reflection or hostility. This relationship has been found in the following studies:

11. Maternal rejection associated with dependency but not with aggression. Paternal rejection associated with both dependency and aggression, sixth-grade boys. Child characteristics measured by peer nominations; parents' by attitude questionnaire (Winder and Rau, 1962).
12. Slight but significant positive correlation between rejection and dependency. (Sears et al., 1957).
13. Parental "interpersonal distance" from child (parent attitude inventory) related to high frequency of teacher contacting among nursery school-aged girls (Marshall 1961).
14. More dependency reported either father or mother rejecting. Boys studies through period of pre-adolescence and adolescence, case records (McCord et al., 1962).
15. Rejection of child related to dependency on adults (r=.30). Dependency assessed through child questionnaire; adopted children (Wittenborn, 1958).
16. Rejection (measured by mother interview) positively related to observed dependency in preschool aged children (Smith 1958).

The hypothesis concerning the relation of the permissiveness restricttiveness dimension to dependency is that restrictiveness will prevent the child from acquiring autonomous skills for coping with his needs, and therefore, will be associated with continued high dependence upon parents and other adults. There are a number of studies which support this hypothesis:

1. Children raised in warm and permissive homes (as measured by parent-self ratings) are more independent than children raised in warm but restrictive homes. The children's characteristics were assessed through behavior observation and projective tests, grades kindergarten through six (Watson, 1957)

2. Children being raised in a kibbutz with a structured (relatively restrictive) program were compared with those raised in a kibbutz with a more permissive philosophy. In the structured Kibbutz there was more seeking of attention and help from adults; in the permissive kibbutz there was more crying and thumbsucking among children under 2, and dependency directed toward peers among children over 2 (Faigin, 1958).
3. High restrictiveness on the part of either father or mother associated with dependency and aggression in boys (Winder and Rau, 1962)
4. Dependency upon adults during middle childhood and adolescence among boys was associated with high parental demands, strict parental supervision, and high restrictions imposed by parents. Dependency upon age-mates, on the contrary, was associated with a total lack of parental restrictions and supervision (McCord et al., 1962)
5. Boys who were restricted by "overprotective" mothers were either passively dependent or demandingly dependent upon their mothers (Levy, 1943).
6. Maternal restrictiveness is consistently associated with dependency in girls throughout childhood and into adulthood. For boys, there is a reversal: maternal restriction during the 0 to 3 age period is associated with independence in adulthood, while restrictiveness during the ages 3-6 predicts dependence in adulthood (Kagan and Moss, 1962).
7. Maternal "overprotectiveness" is positively correlated with children's submissiveness " (Finney, 1963).
8. Maternal permissiveness for autonomy in the infant feeding situation correlated with autonomy at preschool age. Correlations reported for boys only (Murphy, 1962).
9. Dependency toward the mother was positively related to maternal overprotectiveness ($r=.49$, subjects of preschool age) (Smith, 1958).

Baumrind and Black (1967) have studied some of the child-rearing correlates of autonomy in preschool aged children, reporting that autonomy (independence) are associated with the following aspects of parental behavior:

> Boys: consistent discipline, high maturity demands, encouragement of the child's making independent contacts. Use of reasoning to obtain compliance, low restrictiveness, and low use of coercive power.

Girls: High socialization demands low use of coercive power, punitiveness and parent initiation (rather than child initiation) of control sequences.

Behavioral correlates of independence and dependence

Studies have been conducted to determine other personality and behavioral attributes which correlated with dependency. In a study of preschool children Baumrind and Black (1967) found dependent behaviors to be associated with passivity and conformity. While Marshall and McCandless (1957) report that dependence on adults is negatively associated with the amount of interaction with peers and the number of dependent bids directed toward peers.

Moore and Updigraff (1964) found that popularity with peers and acceptance by them are negatively associated with the level of a child's adult-oriented dependency. Relatedly, Harris (1972) found a positive relationship of dependency and modeling behavior. Further, a number of studies have obtained high positive correlations between dependency and aggression on both ratings and observational measures.

There is some evidence of a negative association, however. Faigin (1958) in an observational study of children aged 19 to 38 months living in two Israeli Kibbutz, found a strong negative correlation (-.73) between dependency and aggression.

Inasmuch as there has been fewer studies on the relationship of dependence - independence to our variables, especially with Black children, it will be interesting to obtain information regarding the interrelationship of these constructs. For example, what are the child-rearing antecedents of independence and dependence in black children? How does independence and dependence on tests relate to behavior in the classroom? What is the relation of independence - dependence to Self-Concept, Locus of Control, IQ, and Reflection-Impulsivity in Black preschool children?

Impulsivity Reflectivity

Kagan and Kogan (1970) view reflection-impulsivity (R-I) as the degree to which the subject reflects on the validity of his hypothesized solutions in problems that contain response uncertainty. There are many test procedures that would be adequate indexes of this disposition. The specific test used most often is called Matching Familiar Figures. The child is asked to select one stimulus, from six variants, that is identical with the standard. Number of errors and response time to the first hypothesis are the two major variables coded.

Recently there has developed a well-known Block-Kagan interchange aimed at clarifying the nature of the reflection-impulsivity construct and its operationalization through the Matching Familiar Figures Test (MFF), in which the ambiguity of the construct has been highlighted. On the one hand, it was argued that Kagan advanced many possible and even contradictory interpretations of the dynamics of reflection-impulsivity (Block, Block, and Harrington, 1974), and that the construct validity for various interpretations of MFF performance was marginal at best. Suggesting that the research popularity of the MFF was derived not from its scientific merit but rather from the great surplus meaning typically attributed to the terms "reflective" and "impulsive." Block and his associates argued against Kagan's various construct interpretations of MFF responding, and supplied the alternative construct of "ego resiliency." They also found that MFF accuracy has numerous and important personality correlates - concomitants that serve to demonstrate that many popular attributions to MFF performance and to the construct of reflection-impulsivity are in fact justified. On the other, hand, in their reply to Block and his collegues, Kagan and Messer (1975) specifically disavowed such broader popular attributions and suggested that the construct has no generalizability that had in fact just been demonstrated by Block et. al. Furthermore, in spite of the explicity stated denial, in another part of their rebuttal, Kagan and Messer suggest that the construct and its measures do in fact have broad correlates in the personality sphere (p.246). A final complication is that Block, Block, and Harrington (1975) specifically refute studies cited by Kagan and Messer as demonstrating construct validity, while of course reiterating the validity of their own very broad interpretation of MFF accuracy. In summary, Block et. al. argued that MFF accuracy and not latency carries the important psychological variance; while Kagan and Messer suggest that both accuracy and latency carry significant variance (orginally, Kagan emphasized only latency). Both approaches will be employed in the analysis of the data from the project and the behavioral ratings as well as intercorrelations will undoubtedly add more information regarding the generalizability of the constructs.

Although Block, Block, and Harrington (1974) has provided an extensive review of the literature relative to MFF, we will present an analysis of the studies related to the variables under consideration in this project: age, sex and SES differences in I-R.

Kagan (1965a, 1965b, 1965c, and 1966) report clear and dramatic increase in response time with age over the five to 11 years age range in American children. Moreover, at every age there is a negative relation between response time and errors - usually ranging between -.40 and -.65. These findings are supported by other studies (Constantini et. al., 1973; McCormich and Schvorkich, 1969 and Nuessel, 1972).

The findings with respect to sex differences have been less clear cut. Massaie and Massaie (1974) found that accuracy measures on the Bonta's Early childhood MFF to be more positively related to intelligence for females but not for males. He, therefore, suggests that cognitive style dimensions are not functionally equivalent for both sexes. Supporting this notion are studies by McKinney (1975), and Constantini et al. (1974), in which conceptual style was found to influence teacher's perception of classroom behavior of boys but not of girls (McKinney, 1975); and conceptual tempo was related to inhibition of movement and movement acceleration for girls but not for boys (Constantini, 1974). Thus, cognitive style may interact with other variables and manifest itself differentially in terms of behaviors of girls and boys.

Hess and Shipman (1965) found that in general lower-class Black children are more impulsive than middle-class Black children and lower-class Black mothers are more impulsive than middle class Black mothers. Further, Hallahan (1970), suggests that since the economically disadvantaged child has an impulsive, rather than a reflective, cognitive style, and thus, impulsivity is similar to that shown by the hyperkinetic child, therefore, methods of teaching hyperactive children should be used for the disadvantaged. Zacher (1968) compared lower class Black and middle class white subjects in perceptual tempo. Lower class subjects problem solving decisions significantly faster than middle class subjects, and also, made significantly more errors. Thus, the general conclusion with respect to MFF is that lower-class subjects are more impulsive.

Cognitive Development, IQ and I-R

The correlations between IQ and impulsivity-reflectivity are somewhat ambiguous. Kagan, 1965, found a positive correlation between IQ and reflectiveness; however, Achenback and Weisz (1975) suggest that mental age may be more appropriate than IQ as an index of developmental variance in impulsivity-reflectivity. Moreover, Plomin and Burr (1973) found that when the MFF was given first, errors correlated significantly (-.38) with WISC performance IQ but not with verbal or full-scale IQ. He, therefore, concluded that MFF error scores may tap the same ability as several performance subtests of WISC.

On the other hand, several investigators (Stawor and Lamp, 1974; Keogh and Donlon, 1972; Messer, 1970; Ollnedick, 1973; and Hollahan, 1973) found a positive correlation between performance in school of learning disabled and normal children and impulsivity.

Better performance in school is usually based on a variety of performance patterns. Thus, reflectivity has been positively correlated with logical deductive reasoning (Berzonsky and Ondrako, 1974), word recognition (Erikson, 1973), and problem solving strategies (Odom et. al., 1971 and Pendleton, 1975), and discrimination learning (Henry, 1973). Further reflective subjects made more responses on the basis of "form" rather than "color" (Katz, 1971). Form is believed to be a higher form of conceptual reasoning than color.

Conflicting evidence is presented by Laosu (1970) in which no significant relationships were found between impulsivity and measures of intellectual performance, and Denney (1976) who found that reflection-impulsivity did not distingush between poor and good readers.

Relation of I-R to other variables

The dependent variables in this study which have been found to be related to R-I are locus of control, self-concept, field dependence, and independence.

Loney (1974) using projective measures, found a strong association between the two characteristics of self-concept and impulse control. Finch, in his studies of emotionally disturbed children (Finch, 1974; Finch, 1974; Finch, 1975; and Montgomery and Finch, 1975), consistently found impulsive subjects to be externalizers; while reflective subjects were internalizers. However, Massari (1975) found no significant relationship between R-I and locus of control in 60 Black first graders and third graders. Campbell and Douglas

(1972) and Massari (1975) ascertained that reflective children (6, 8 and 10 years old) were more field-dependent than impulsive children of the same age.

Behavioral correlates of I-R

Since the controversy between Kagan and Block is based on behavioral and personality correlates, much attention has been addressed to these constructs. Kagan and Kogan (1970) suggests that impulsive children are more restless, distractible, hyperactive, emotionally uncontrolled, risk taking, gregarious, hyperaggressive and retaliative.

However, Block and Block's (1974) results indicate that accuracy had important personality concomitants; latency was inconsequential. Fast/inaccurate children were anxious, hypersensitive, vulnerable, and structure-seeking; they were not impulsive, minimally concerned and unanxious as conjectured by Kagan.

Many of the other studies were conducted prior to Block and Block's analysis. However, McKinney (1973; 1975) found that teachers rated impulsive boys as less task-oriented and considerate their reflective counterparts. Impulsive girls were rated as more distractable than reflective girls.

Mann (1973) suggests that reflective subjects have a general disposition to take longer in making decisions.

Reppaci (1970) in his observation of 27 month old children found that sustained involvement with toys was positively related to response times in conflict situations, and negatively related to motor activity.

Finch (1975) found that latency but not error scores was significantly related to duration of persistence.

Also, Ault et. al. (1972) found that reflective and fast-accurate subjects were more systematic and made a greater proportion of comparisons than impulsive and slow-inaccurate subjects.

On the other hand, Bjorklund and Butler (1973) suggests that cognitive impulsivity is not predicted by classroom behavior, implying that an individual's preferred conceptual tempo is not part of a global behavior pattern, but a relatively independent dimension of cognitive style. This view is supported by data from Fisher (1966).

In a study of the ability to delay gratification on gratification, another aspect of behavior closely related to the reflection-impulsivity dimension, Shipman (1971) reported no relationship between the Mischel's Delay of Gratification procedures and MFF time and error scores ($r = .01$ and .00). The absence of relationship between delay of gratification and conceptual tempo was also reported by Hess et. al. (1969), again using response latencies in Kagan's Design recall test as the criterion measure of reflection-impulsivity.

In an attempt to clarify the personality and behavioral correlates of MFF, a multi-method multi-trait approach was employed by Bentler and McClain (1976). Although validity as assumed by multitrait-multimethod analysis was high, only isolated personality variables correlated highly with any MFF variable. Thus, they suggest that MFF may not measure a generalized tendency toward impulsivity, even impulsivity within the classroom, or that the meaning of MFF scores may be different among pre-school children than among older children. The Block et. al. (1974) data were based on four to five year olds. Certainly, the results of this study based on actual observations of behaviors rather than reports should help to clarify this controversial issue.

Child-rearing and I-R practice

In one of the few studies of the impact of childbearing practices on I-R scores, Campbell (1973) found that mothers of hyperactive subjects provided more direct help, encouragement, and impulsive control suggestions during difficult tasks.

Although not parents, teachers also have influence on conceptual styles of subjects. Yondo (1968) found that subjects taught by experienced reflective teachers showed a greater increase in response time over the course of the academic year than all other children.

In-as-much as the data regarding the influence of childrearing on reflection-impulsivity is sparse, this study should make important contributions in this area. Some illustrative questions to be answered by this research project are: (1) what are the age, SES, and sex differences in accuracy and latency scores on the MFF? (2) What are the behavioral correlates of accuracy and latency scores as measured by Block et al. (1974) and Kagan and Messer (1975)? (3) What are childrearing antecedents of accuracy and latency scores of Black preschool children?

Self-Concept

Although many definitions of the self-concept have been offered, researchers often define the concept differently, and therefore, measure different concepts when they are supposedly studying the same construct. Some researchers, have attempted to delineate a specific kind of self-concept, such as the self-concept of ability, completing tasks, coping with fears, etc. (Barber, 1975). Others, Spencer, (1975) and Williams (1974), suggest that self-concept should be broken down into academic self-concept, racial awareness, racial attitudes, self-acceptance and racial identification. Michael et al. (1973) conclude, therefore, that based on results of comparisons of methods for measuring self-concept, there is indication that it is a complex entity made up of many constructs, the validity of which is dependent upon the measurement procedure. Since comprehensive reviews of self-concept literature abound, this review will be addressed to specific studies dating back to 1967 which have examined issues critical to the present study.

Age, sex, and SES differences in self-concept

Generally, self-identity is thought to increase with age. Guardo and Bohan (1971) found that the sense of self-identity and its dimensions are demonstrable developmental phenomena with the responses of younger and older subjects showing clear qualitative differences. Reactions to minor images have been used to study age differences in self-identity as early as six months (Amsterdam, 1972). The subjects first prolonged and repeated reaction to his mirror image was that of a sociable "playmate" from about 6-12 months. By 20-24 months, 65% of the subjects recognized their mirror image.

The data on sex differences in self-concept are equivocal. Bledsoe (1973) found that girls had more positive self-concepts; however, he suggests tht since most items on the test favored girls, the over-all sex difference favoring girls is probably an artifact of measurement.

On the other hand, Carpenter and Busse (1969) found that girls were more negative than boys. Similarly, Fein (1975) found that male self-esteem was greater than female self-esteem among older subjects, as did Smith (1975) who found that males rated themselves more favorably on physical ability, covergent and divergent mental ability, school subjects, attractive appearance, social relations and social values.

Recent investigators have examined the inter-action of other factors with sex differences. For example, Hollender (1972) found sex differences to be related to social self-esteem. Subjects high in social self-esteem were males with high need for approval, females with low need for approval, males with grades of A and B, females with grades of C, and male first born with second born female siblings. These results lead to the conclusion that males must succeed in culturally masculine role to maintain self-esteem.

It is widely held that middle class subjects will have higher self-concepts than lower class subjects. This hypothesis was supported in a study of middle and lower class Black and White children (Samuels, 1973). She found that both white and middle class subjects had higher self-concept scores than lower-class subjects.

Opposite results were found by Soares and Soares (1970), and Trowbridge (1972a; 1972b). In the three studies, children of low SES consistently had a higher self-concept than children of middle SES. These differences in findings with respect to self-concept and socio-economic status may be attributable to differences in measurement and definition.

Race differences in self-concept

Studies of ethnic differences in self-concept have yielded conflicting results. However, the majority of studies suggest that Blacks have lower self-concepts than whites (Gibby and Gabler, 1967; Long and Henderson, 1968; Muller and Leonetti, 1974; Shelibow, 1973; and Zirkel and Moses, 1971).

Contradictory findings are reported by Pendergrast et al. (1974), who concluded that Black girls rated themselves significantly higher than white girls. Also Carpenter and Busse (1969) and Davids (1973) failed to find any significant differences between the races on self-concept.

Cognitive development, academic achievement and self-concept

Significant positive relationships between self-concept and academic achievement were obtained by Caplin (1969), Leviton (1975), Ozenbasky (1970), Rawson (1974), Simon and Simon (1975), and Williams and Cole (1968). Although there are several studies yielding this result, the cause and effect relationship has not been established. That is, no evidence has been found which determines whether low achievement causes low self-concept or vice-versa. However, Koocher (1974) suggests that the cognitive level (beyond Piaget's preoperational stage) enhances self-ratings.

On the other hand, Williams (1973) did not find any significant correlations between reading achievement and self-concept. And Trowbridge (1974) reports that subjects on both the high and low end of the IQ scale had lower self-concept scores than subjects in the middle of the range. The relationship was significant but not linear. Clearly, the evidence with respect to self-concept and academic achievement is equivocal. Although this issue will not be addressed directly in this study, the relationship between IQ and self-concept will be obtained.

Personality and behavioral correlates of the self-control

Few studies have examined behavioral correlates, other than intelligence and academic achievement, of the self-concept. However, Loney (1974) found a strong association between impulsivity and self-esteem. Also, Vance and Richmond (1975) found that children with low self-concepts were more cooperative than those with high self-concepts.

Child-rearing practices and self-concept

With respect to parental socialization practices, Qadric and Kaleem (1972) found children of permissive parents to be better adjusted and to have greater self-esteem than those of over-protective parents. Further, Sears (1970) found that both sexes high self-concepts were significantly related to small family size, early ordinal position, and high maternal and paternal warmth.

It is generally hypothesized that frequent absence of adult males from households of lower-class Blacks result in boys perceiving themselves as less worthwhile persons, compared to boys who live with adult males and to girls who live with or without an adult male. However, Rukin (1974) did not obtain data which would support this hypothesis.

While the self-concept construct is ambiguous, several questions to be addressed in this tudy appear to have significance for the literature. (1) What are the behavioral correlates of positive and negative self-concepts of Black preschool children? (2) Are there differences in childrearing patterns between parents of children with high and low self-concepts? (3) Is ther a relationship between self-concept and other personality variables, such as locus of control, impulsivity, aggression, dependence-independence, and sex-role identification?

METHOD

Subjects

The subjects in this report were 61 Black preschool children between the ages of three years nine months and four years four months at the time of testing. Subjects, selected from seven day care centers partcipating in the project were classified according to social status, lower, lower-middle and middle SES, according to the education and occupation status of the parents.

All procedures will be presented in terms of activities and data during the 1975-1976 funding period. (For data and procedures conducted prior to July, 1975, the reader is referred to the Year I Final Report). Major activities during this period include:

- Mini-training sessions for staff.
- Delineation and modification of procedures.
- Visits to Day Care Center.
- Assessment of current status of data and recruitment of additional subjects.
- Scheduling and collection of data.
- Refinement and piloting of Childhood Ecological Interview

Mini-training sessions for staff

All members of the staff were involved in a three day training session during the month of September, for the purpose of orientating new staff and reacquainting old staff members with procedures for general data collection and the overall purpose of the project. Specific sessions were held for: (a) new testers administering the intelligence test; (b) research assistants administering personality measures; and (c) research aides recording video data.

A general outline of the sessions consisted of demonstrations, observations, role playing, and record-keeping. All sessions were video recorded,and to avoid using subjects from the sample, various members of the staff brought in children within the age group to act as subjects for the sessions.

After the completion of each scoring session, intertester reliability was established for each test. All instruments with the exception of the Stephen-Delys Reinforcement Contingency produced a coefficient above .95. To improve intertest reliability for this instrument further training was provided which resulted in greater reliabilities between tester (r=.87).

Delineation and modifications of procedures

In order to maximize the accuracy and the usefulness of the data, it was necessary to detail and make several modifications in the testing and analysis procedures. The modifications are explained below.

(1) Ten test batteries (25% from the original pool of 40 subjects, who had been screened, and who had received at least two personality measures during 1974-75 funding period) were randomly selected, and independently rescored. In rescoring, each protocal was specifically examined for coding and scoring errors. The result of this examination proved very satisfactory in that there was over 95% consistency between the original scoring and the rescoring.

(2) From the mini-training sessions, it was determined that administration of the entire 40 items of the Stephens-Delys Reinforcement Contingency Interview (SDRI) contributed to the lack of responsiveness and noted fatigue in children taking the test, as reported in the Year 1 Final

Report. Therefore, instead of administering the entire instrument, the last 20 items, which according to Delys (1971) comprises Form B, has been deleted. Stephens and Delys (1973) reported that while the 40 item questionnaire may be more powerful, it is likely that the 20 item shortened version would be almost as powerful as the full interview, and it would save substantial time and fatigue. Thus, only responses to Form A of the SDRI were analyzed and Form A alone will be administered during Stage 11.

(3) Since the Matching Familiar Figures test yielded a latency score which had been recorded in fractions of seconds causing coding problems, the score now is recorded in tenths of seconds. The total latency score, however, is rounded off to the nearest whole.

(4) Only subjects who had been screened and had complete personality data were included in the preliminary analysis for Year 11, irrespective of whether they had dropped out of the study or not. For practical reasons, it was decided that no attempts would be made to follow children who dropped out of the study, but an attempt will be made to account for their attrition.

(5) All subjects will have two sets of data. The first at four years of age (Stage 1) and the second when they are retested at age five (Stage 2). Both sets of data will include intelligence scores.

(6) The purpose of the Stanford-Binet has been modified. Originally this instrument was selected to be used as a screening device to eliminate low competent children from the study, however, inasmuch as IQ data are available, a decision was made to use this information in post-hoc data analysis. Data will be processed and transferred to tape for storage, retrieval and analysis.

(7) Each person collecting data in the field is required to write an observational summary after each testing or video recording session. The summaries include general attitude of child, unusual conditions, responsiveness of the child and any other unusual situations or circumstances that occurred while at the day care center and during the testing or filming.

(8) While occupation and education were originally employed as a preliminary index of social status, it is believed by the present investigators that occupation and education alone are not valid measures of SES in the Black community (See Appendix A for a working paper on Social Status and Black Americans developed by the first author). Therefore,a more detailed index will be developed to determine social differentiation in Black families based on the information obtained from the Childhood Ecological Interview. For example, occupation, education, income and occupation of the grandparents of children will be combined with data from census block and tract variables, such as occupation of block, income of block, property value and/or rental payments. It is believed that the latter are critical components of social differentiation in the Black community, at least in the geographical area that the project is being conducted. Patterns of clustering of high price homes, low price homes, high rental rates, low rental rates correlate with income levels in the Nashville community. Warner et al., (1949) used a similar procedure based on the source of income, occupation, house type and dwelling areas. He assigned status weights to each indicator on the basis of their validity, e.g., inherited wealth was ranked as the highest status level of income, while public welfare was given the lowest ranking. As opposed to face validity, however, the proposed SES indices for this

project will be assigned independent weights as determined by factor analysis.

Visits to day care centers

All day care centers were visited during the months of October and the first week of November. The purposes of the visit were to: (1) introduce the new assistant project director; (2) verify all returning students; (3) obtain a list of prospective students between the ages of three years - nine months to four years-four months; (4) find out more about the structure and composition of the day care program; and (5) determine the feasibility of having one of the research assistants collect data for her master's thesis, which is related to the study.

All centers were very receptive and cooperative. A summary chart (in Appendix B) is included to show the breakdown of each center's program. Additionally this presents the total number of students in the day care center by class, number returning to the project from the previous year, number of prospective subjects, number of available testing sites, as well as the classification of personnel in each center. At this point, no decision has been made as to how this information will be used, but it is considered a vital aspect of the ecological environment of the day care center.

Assessment of current status of data and recruitment of additional subjects

Out of the original 66 children for whom permission slips were received in September, 1974, 40 children remained in the study as of September, 1975. Table 1 shows a breakdown of the number of children at each day care center, along with a summary of the status of each child for the year 1974-1975.

Table 1

Summary Status of Data for 1974-1975
by Day Care Center

	9/74	9/75	Day Care Center	I	II	III	IV	V	IV	VII
	8	0	A	1	-	1	1	4	1	6
	19	15	B	-	2	1	-	11	5	1
	12	6	C	2	-	1	1	7	2	4
	2	2	D	-	-	-	-	2	-	-
	6	5	E	1	-	-	-	2	3	-
	4	2	F	-	2	-	-	1	1	-
	11	7	G	-	1	-	2	8	-	3
	4	3	H	-	-	-	-	2	1	-
Total	66	40		4	5	3	4	37	13	14

Note.

Col. I	Dropped out before screening
Col. II	Dropped because of low IQ
Col. III	Moved during Year 1
Col. IV	Partial personality testing
Col. V	Complete personality testing
Col. VI	Under 4
Col. VII	Moved as of 9/75

A careful examination of Table 1 reveals that beginning in September, 1975, 37 children had been administered complete personality testing. The 13 children who were identified as prospective subjects, but were not age appropriate along with the four partially tested, were the first scheduled for testing. At the end of 1975, all four of the partially tested subjects were completed along with seven of the 11 children who were under four. Thus, there were 48 children with complete personality testing (21 males and 27 females).

By January, 1976, 10 of the 48 children with complete data had dropped out, increasing the number of new subjects needed to maintain a sample of 60 to 22.

In order to obtain additional subjects, each day care center was sent a letter requesting a list of all children at their center, whose ages were between three years, nine months and four years, four months. There were 64 age appropriate children recommended by the seven day care centers. Upon receiving the list of children, each parent was sent a letter explaining the project and was asked to return the Parental Consent Form (Appendix C) indicating whether they would allow their child to participate in the study.

A two week period was allowed for parents to return the permission forms. At the end of the two weeks, 38 parents (59%) responded favorably. Since it was virtually impossible to personally contact all parents requesting additional information, a second letter was sent answering questions generally raised by parents in the study (see Appendix C). Also a letter explaining the status of the project was sent to parents of children remaining in the study for 1974-75. Twenty-five additional children receiving parental consent were screened for participation in the study. To avoid retesting any children after December, 1976, all new children had to be four years of age on or before January, 1976, which eliminated 13 children with obtained permission from parents. Two of the 25 children screened were eliminated because of the inability of one of the examiners to establish rapport with them in that the presence of a teacher was required for the entire session.

Table 2 shows a summary of data by day care centers for 4-year-olds.

Table 2

Summary and Status of Data for 4-Year-Olds By Day Care Center

9/75	1/76	3/76	Day Care Center	I	II	III	V
0	4		A	0	0	0	4
15	17	17	B	13	3	1	0
6	14	11	C	9	2	0	3
2	2	2	D	2	0	0	0
5	8	8	E	3	3	2	0
2	1	0	F	0	0	0	1
7	18	15	G	8	5	2	2
3	7	7	H	2	0	5	0
40	71	60	37	37	13	10	11

Note.

Col. I	Tested before December, 1975
Col. II	New subjects tested
Col. III	New subjects not included in Year I analysis
Col. IV	Complete Year I data but dropped

The data analysed for the present report only involved subjects included in Columns I,II, and IV. Although 11 of the 61 subjects dropped out during the months of December and January, 10 additional new subjects were selected (Column III) to maintain a total number of 60. The 13 children in Column II were not included in the sample because they had not received a complete battery at the time of the data analysis. Analysis of the data by sex revealed consistently that there remains a proportional distribution of males and females participating in the study. Table 3 shows the number and percentage distribution by sex for 4-year-olds. Careful examination of the table shows that of the total number of children tested at the age of four during the month of January, 58% were females and the remaining 42% were males.

Table 3

Distribution for Four-Year-Olds by Sex

	12/74		1/75		2/75		3/75	
	N	%	N	%	N	%	N	%
Males	21	44	25	41	30	42	27	45
Females	27	56	36	59	41	58	33	55
Total	48		61		71		60	

Table 3 shows also that of the 48 children having complete data before December, 21 were males and 27 were females. With the addition of the 13 new subjects (4 males and 9 females), the percentage distribution shifted for females from 56% to 59% and males downward from 44% to 41%. Of the total sample of 4-year-olds with complete data reported in Table 3, there still does not appear to be a significant difference in the number of males and females in the study. Of the total number of subjects presently remaining in the study, as indicated in Table 3 (3/75), 27 are males and 33 are females.

Table 4 gives the sex distribution by day care centers. Three of the participating day care centers maintain the larger prportion of the children: Centers B,C, and G, with 27, 22 and 25% respectively. With regards to size and number of children participating in the centers, these also have the larger programs. It should be noted also that Center A closed after the 1974-75 school year, even though completed data on 4-year-olds were obtained for four children.

Table 4

Distribution for Four-Year-Olds by Sex and Day Care Center

Day Care Center	Males		Females		Total	
	N	%	N	%	N	%
A	1	4	3	8	4	6
B	8	33	9	24	17	27
C	5	20	9	24	14	22
D	0	0	2	5	2	3
E	0	0	6	16	6	9
F	1	4	0	0	1	1
G	8	33	7	19	15	25
H	2	9	0	0	2	3
Total	25		36		61	

During the period, from September through March, the retesting of children at 5 years of age began. Table 5 gives a breakdown of the status of children during this period, including a projected schedule for the completion of data collection.

Since this report does not include an analysis of the 24 children that have been retested at this time, the information below is presented as a means of communicating the activities in which the project has been engaged during the year.

Table 5

Current Status of Data on
4-and 5-Year-Olds

Day Care Center	I	II	III	IV
A	4	0	0	0
B	17	17	8	9
C	14	11	5	6
D	2	2	1	1
E	8	8	2	6
F	1	0	0	0
G	18	15	6	9
H	7	7	2	5
Total	71	60	24	36

Note.

Col. I	4 Year old tested
Col. II	4 Year old tested and maining in study
Col. III	5 Year olds presently retested
Col. IV	5 Year old schedule for testing during the school year 75-76

In summary, the results presented in this report will only include data for 61 four years old subjects who received complete personality measures from September, 1974 through January, 1976. The reader should keep in mind that the 10 additional subjects who replaced the 11 subjects who dropped out, have been given personality measures, but the data was not available at the time of the preliminary analysis.

Scheduling and collection of data

Data collection was carried out in two stages: Stage 1 included the completion of data on 4-year-old subjects, September, 1974 through January, 1976, and Stage 2 began with the retesting of children at the age of five, which will be continued through April of 1976. An initial activity for Stage 1 consisted of developing new testing schedules for those children who have been screened (i.e., administered the Stanford-Binet-Form L-M) and given personality data, or who were screened and were under age four, during the 74-75 school year.

Research assistants were assigned children according to the breakdown of the stratified random sample so that each would test an equal number of subjects as well as an equal number of males and females. This procedure was employed for the administration of the Stanford Binet as well as the personality measures. All attempts were made to avoid bias due to tester familiarity with children.

The research aides, on the other hand, were assigned day care centers rather than children. Since two of the aides resigned, only two aides were responsible for recording at the seven centers, compared to four aides last year. However, it was still possible to avoid familiarity bias, by assigning each aide to centers which they did not work with the previous year. Each aide was assigned to three centers with both working the seventh center.

Since VR always follow the completion of personality data on each subject the research aides' schedules are coordinated with the research assistants. Therefore, two master schedules were devised. Those children who were below four years of age during the 1974-75 testing were tested first, along with four children with partial personality tests.

A second part of the Stage 1 process began in January, consisting of (1) identifying age appropriate, potential subjects in participating centers, (2) recruiting additional children, (3) screening and selecting new subjects and (4) chronological testing of oldest to youngest children to complete the 4-year-old data.

To accelerate the screening and selection process of newly identified children, four research assistants administered the Stanford-Binet, employing the established procedures for stratifying the sample. Thus, children were divided into two groups, by sex, and then randomly assigned to one of the four examiners. After all new children had been screened, research assistants were assigned to administer the personality tests to the 5 year old subjects.

At the time of this report, 24 children have been administered the second series of test. This series is administered when the child reaches age five, and includes the Stanford-Binet and all five personality measures.

Refinement and piloting of Childhood Ecological Interview

A parental interview questionnaire was devised for the purpose of obtaining additional data on the child and her environment, as perceived by the parent.

The Childhood Ecological Interview (CEI) was originally designed to be administered during the interval between the collection of 4-year-old and 5-year-old personality and observation data. However, it was decided, from a methodological and pragmatic viewpoint, that it would be more logical to administer the interview instrument after the second tests and observation data were completed on each subject. This will reduce the likelihood of the home interview influencing the personality and observational data.

The criteria employed for deriving questions on the CEI included selecting (1) items that appeared to correlate with the personality variables (aggression, self-concept, locus of control, sex role, dependency-independency and reflection-impulsivity); (2) items that appeared to be general enough to elicit specific information about the characteristics and environment of the home; and (3) items that have been shown to be reliable indicators of "marker variables, " e.g., SES, family type, religious affiliation, etc. SES will consists of income, education and occupation of the family. A tentative list for the CEI is included below to demonstrate the variables that the instrument is attempting to measure.

The questions on the interview instrument are ordered in a systematic way, but presently, there appears to be some overlap of the variables that they are designed to measure. the categories in which computations are being made include:

1. Developmental

    a. Parent's perception of child's personality.
    b. Childrearing practices as related to personality.
    c. Parental aspiration for child.

2. Social Ecology

    a. Family type and composition
    b. Kinship support system
    c. Neighborhood support system
    d. Social interaction
    e. Social status
    f. Social mobility
    g. Social roles of family members
    h. Social adjustment

3. Physical Ecology

   a. Characteristic of neighborhood
   b. Quality of home space
   c. Perception of neighborhood-community

The computation of the above variables involve categorizing items that are judged to measure the same variables, and assigning weighted scales to each for an index of the variable category. Reliability will be determined by (i) piloting the interview on a sample which equals 20% of our sample, with similar social characteristics (i.e., family size, occupation, education, age, sex, etc.); (ii) establishing a reliability coefficient between interviewers; and (iii) conducting an item-analysis on variable categories. An attempt will be made to establish validity by including overlapping items designed to cross-validate consistency of reponses. However, two of the problems of the instrument at this time are the length and the redundancy of some items. Both are seen as minor problems and are expected to be reduced following piloting.

As a means of obtaining external evaluations of the instrument, four consultants were requested to critique the preliminary version of the CEI. Each contributed substantive recommendations, which were included in the pilot questionnaire. Additionally, comments and suggestions by the consultants were employed in development of instructions for interviewers. The instruction manual consisted of two parts: general instructions and specific instructions. (See Appendix E).

The research aides, along with a third paraprofessional, conducted the pilot interview. Each interviewer was requested to contact four parents for participation in the piloting. The interviewers were informed that all participants must have a five-year-old child attending a day care center.

At the time of contact, each prospective interviewee was informed that they would receive a token payment of $5.00 for their participation. To avoid familiarity, each interviewer was asked to either select persons whom they did not know, or to exchange persons they knew with another interviewer.

The major problem encountered during the pilot stage was broken appointments resulting in 4 of the 12 interviews not being conducted at this time. However, these remaining pilot interviews have been scheduled and upon completion, the pilot data will be analyzed. These results will be reported in the end of the Year Report for Year II.

PRELIMINARY ANALYSIS AND PILOT STUDIES

The results reported herein consist of preliminary analysis of cognitive and personality measures of 61 four-year-old black children. These subjects will be retested at approximately five years of age. The present analysis examines the interrelationships of cognitive and personality scores, as well as means and standard deviations of scores on each measure. In addition, three pilot studies which relate to the present investigation are reported. These studies were independent investigations conducted by the research assistants, as part of their requirements for the master's degree in psychology (Anderson, Note 2; Smith, Note 3; and Taylor, Note 4). Findings relevant to the project are included here for the purpose of examining recent data which could be useful in future interpretations. Further, each research assistant, was supervised closely and provided partial data or instruments in conducting their research investigations.

A. Preliminary analysis of data for four-year olds

Inasmuch as more extensive analysis of data on four-year-olds will be presented in the end of the year report for Year II., the data reported here includes only mean and standard deviation scores of I.E., sex preference, latency time (MFF),incorrect responses (MFF), self-concept, physical aggression, verbal aggression, leaving the field (i.e., to avoid aggression), coping, internality, and externality. Intercorrelations of these variables are analyzed to determine (a) their relationship to one another, and (b) the degree to which subscales measuring global construct (e.g., aggression) are independent of each other.

Table 6 shows means and standard deviations of subjects for each measure.

Table 6

Means and Standard Deviations of Cognitive and Personality Measures for 4-Year -Olds

Measures	M	SD
1. IQ	103.80	12.27
2. Sex Preference	5.54	1.59
3. MFF Latency Time	38.39	23.60
4. MFF Incorrect Responses	5.62	5.70
5. Self-Concept	26.39	12.50
6. Physical Aggression	8.23	3.39
7. Verbal Aggression	8.95	2.58
8. Learning Field	9.15	3.08
9. Coping	9.11	3.10
10. Internality	5.16	4.80
11. Externality	12.29	5.59

Note.[a] Total N=61

As expected Table 7 shows Self-Concept to be directly related to I.Q. ($r=.33$, $p \leq .05$). I.Q. is also directly related to Coping on the aggression scale ($r=.34$, $p \leq .05$). Coping is an alternative response to Physical Aggression, Verbal Aggression, and Leaving the Field ,when a reactive-aggression situation is presented. These other aggression subscales were not statistically related to I.Q., which indicate that at least one alternative to an aggression situation involves cognitive ability.

Table 7

Intercorrelation of Cognitive and Personality Measures of 4-Year-Olds

Measures	1	2	3	4	5	6	7	8	9	10
1. IQ										
2. Sex Preference	.01									
3. MFF Latency Time	.10	-.25								
4. MFF Incorrect Response	-.02	.02	.29*							
5. Self Concept	.33*	-.03	-.14	-.17						
6. Physical Aggression	-.10	.14	-.20	-.10	.01					
7. Verbal Aggression	-.06	.23	-.18	-.05	.01	-.08				
8. Leaving Field	-.12	-.22	.30*	.04	-.13	-.45**	-.51**			
9. Coping	.34**	-.15	.06	.12	.17	-.52**	-.21	-.14		
10. Internality	-.13	.22	-.22	-.15	-.14	.15	.10	-.17	-.10	
11. Externality	.17	-.17	.24	.17	-.04	.05	.09	-.11	.05	-.66**

*$r \geq .26$, $p. \leq .05$

**$r \geq .34$, $p. \leq .01$

Latency time (MFF) shown in Table 7 is related to Leaving the Field ($r = .30$, $p \leq .05$). That is, children with high latency time also tend to score high on leaving the field. There are no explanations,presently, as to why this relationship exist, especially since intuitively one would not expect a relationship between latency and this dimension of aggression to exist.

The other relationships found in Table 7 are between subscales measuring the same construct, i.e., Latency Time and Incorrect Reponses ($r = .29$, $p \leq .05$); Physical Aggression and Leaving the Field ($r = -.45$, $p \leq .01$); Physical Aggression and Coping ($r = -.52$, $p \leq .01$); Verbal Aggression and Leaving the Field ($r = -.51$, $p \leq .01$); and Internality and Externality ($r = -.66$, $p \leq .01$). With the exception of Latency Time and Incorrect Responses on MFF, these relationship were expected, especially for I-E. Subjects who score high on the Internal dimension would predictably score low on the External dimension. The aggression subscales seemingly reflect a similar pattern, subjects who tend to select Physical Aggressive responses appear to have low Leaving the Field and Coping scores, and subjects with high Verbal Aggression scores tend to score low on Leaving the Field. This pattern indicates that the Leifer-Roberts Aggression Hierarchy does have some degree of internal consistency, with the exception of Verbal Aggression which was only related in this manner with one other subscale (i.e., Leaving the Field). Nevertheless, this aggression index was not correlated with the other subscales, which reflects that it is probably tapping another dimension of aggression.

As indicated earlier, the relationship found between Latency Time and Incorrect Responses was unexpected, in that these factors of MFF are usually negatively related. Subjects who tend to have high Latency Time on MFF tasks, tend to have low Incorrect Response scores. This is a predictable outcome since the theoretical assumption underlying conceptual tempo is that reflective (as related to time) subjects make less errors on cognitive tasks than impulsive subjects, eventhough it does not appear to be the case for this sample. It appears that reflectivity (i.e., latency) is directly related to errors in responding (i.e., Incorrect Responses) on the MFF.

B. Related pilot studies

1. In a study to investigate "Self-Concept, Locus of Control and Conceptual Tempo in Black Preschoolers," Anderson (Note 2) selected a matched sample of twenty subjects from the data pool of four-year olds. Subjects were matched for I.Q., sex, and SES (using occupation and education of parents as indicators). These subjects were placed in a 2X2X2 analysis of variance design, and tested for differences and interactions on self-concept, locus of control and conceptual tempo variables.

It was reported that when matched on these variables, only I-E tends to be significant, in that subjects internally oriented tend to come from high SES, and subjects externally oriented tended to come from low SES. With these critical independent variables controlled, no intercorrelations between self-concept, locus of control, and conceptual tempo (Latency Time) were reported. There was, however, a trend of high self-concept being related to externality ($r=.34$). This was not statistically significant, however.

2. In another investigation, Taylor (Note 4) attempted to test the relationship of need for social approval of teachers to expectancy effects. Teachers in the participating day care programs were administered

the Marlow-Crowne Social Desirability Scale. Two teachers were selected as subjects for the study on the basis of their extreme scores on the scales, and similarity of background variables. They were then told that they were participating in a study to determine how rapidly children learn to conceptualize. Each teacher was required to teach an object-sorting task to 10 children, and were informed that half of the children would learn the task in the expected time period, while half would not. Following each teaching session, the children were tested to determine how well they actually learned the task. No significant differences were found between children who were taught by a teacher with a high need for social approval and those taught by a teacher with a low need for social approval.

3. The final pilot investigation was carried out by Smith (Note 3), and was designed to investigate the relationship of children's self-concept and performance reaction-time tasks in father-present and father absent situations. Additionally both parents were administered a questionnaire concerning their child's self-concept. The subjects included black and white 6-8 year old children (9 blacks and 11 whites; 11 males and 9 females), and their fathers. A precoded Father Child Behavior Observation Checklist was constructed by the investigator, and father-child behaviors were recorded at 10 second intervals, giving 144 occurrances per observation of each behavior. The following 17 behaviors were recorded:

A. Father

(1) teaching
(2) structurizing
(3) giving positive directions
(4) giving positive reinforcement

(5) domination
(6) taking over
(7) rejection
(8) physical punishment
(9) leaves field

B. Child

(1) smiling
(2) positive verbalization and/or movements
(3) gives positive reinforcement
(4) behavior to evolk attention
(5) ask for help
(6) ask for reinforcement
(7) rejects help
(8) leaves field

A partial correlation was performed to determine the predictiveness of the father and child's behavior factors in relation to the child's self-concept. There were no father behaviors which were significantly predictive of the child's self-concept. The only child behavior which showed some predictiveness was his verbal or physical expression of happiness ($r= .34$, $p\leq.05$) of the other non-observed behavior variables, the mother questionnaire was related to child's self-concept ($r=.29$, $p\leq .05$).

Multiple regression analysis were performed with father-child behavior factors, i.e., reaction-time, parent questionnaires, and self-concept. These analysis resulted in a total multiple R of .88, with approximately 80% of the variance being accounted for.

The results, which were found to be consistent with previous research, were that fathers reinforced daughters more than sons' independent behaviors, and were less dominating with sons than with daughters. Also, the children who received more paternal reinforcement, expressed happiness through more verbalizations and movements were females.

DISCUSSION

The results reported in this preliminary report does not consist of data on all four-year-olds in the sample (see Methods). Further, objectives of the study cannot be tested until these subjects are retested at age five, and data on other factors have been collected. Therefore, results reported in this paper attempted to identify trends and directions for future study. No extensive discussion will be provided at this time, given the above considerations. However, several findings need to be elaborated.

It appears that the sample has a higher than expected average mean I.Q. ($\overline{X}$= 103.80). But it should be noted that I.Q. was used to eliminate children who scored below 68 on the Stanford-Binet (see Methods). Thus, low extreme scores were excluded from the data, whereas high extreme scores were not. The large standard deviation (12.27) for I.Q. indicates a wider distribution range, possibly due to the presence of extreme high scores in the data. In addition I.Q. was significantly correlated with Self-Concept ($r=.33$, $p\leq .05$), which is expected since subjects with higher I.Q. scores generally have higher Self-Concept scores.

The correlation between Latency Time and Incorrect Responses on MFF was directly related ($r=.29$, $p\leq .05$). This relationship indicates that the subjects can be categorized as Slow/Inaccurates. According to Block et. al. (1974), such children have different personality characteristics from other children characterized on MFF, e.g., Fast/Inaccurates, Fast/Accurates, and Slow/Accurates. Block and his associates report that Slow/Inaccurates appear to be comparatively aggressive, competitive, unanticipating, assertive individuals, with relative little regards for the feelings of others. Although the present study found neither physical aggression nor verbal aggression to be related to performance on MFF, a positive relationship was found between Latency Time and Leaving the Field ($r = .30$, $p \leq .05$) on the aggression scale. It should be pointed out that Block et. al.'s (1974) subjects consisted of a heterogeneous racial sample, and appeared to be mostly middle class in origin, i.e., the Warner, Meeker, and Ells index was .23, which indicated that the parental backgrounds of the children were heavily managerial, bureaucratic, and intellectural. Since the present study is examining a different population, personality correlates will be further examined in a later report.

PROJECTIONS FOR YEAR III

The final Year (Year III) of the project will attempt to accomplish the following:

A. Collect tests and video record (VR) data for remaining five-year-old subjects. Additionally the Childhood Ecological Interview (CEI) will be administered to parents of all children participating in the project.

B. Develop and validate Behavioral Observation Checklist (BOC), which will be employed to rate behaviors of subjects, which were recorded on VR's.

C. Analyze and synthesize test, CEI, and BOC data.

D. Develop curriculum material related to project's findings.

E. Debrief parents of subjects and day care programs that participated in the project.

F. Prepare and disseminate final report.

In addition we will be looking at possible areas of comparability of our data with other research efforts (see below).

Data Collection

Although attempts have been made to stay within the original time schedule, minor time lags have been experienced. Primarily, these have involved selecting and testing new subjects required to replace subjects when one of the day care programs unexpectedly and permanently closed. Consequently, the schedule was adjusted for the collection of data on five-year-old subjects, which will be completed in the Fall, 1976.

The CEI has been piloted and will be administered in April, 1976. As data (tests and VR) are completed on each five-year-old subjects, his/her parent will be administered the interview schedule. Since data is expected to be completed on approximately half of our subjects before Year II is over, attempts will be made to obtain interviews from half of the parents by August, 1976. Parents will be given savings bonds in their child's name as gratuity for the child's participation, as agreed upon earlier in the project. Although parents will be interviewed at different times during the project period, they will be debriefed together at the end of the project (see below).

Behavioral Observation Checklist

Although development of the BOC has been continued, attempts will be made to finalize it early in Year III. Consultants are being involved to assist in this effort. To facilitate this collaboration, a group meeting of consultants and other recognized authorities in this field will be held to examine and/or to discuss (1) subscales composing the BOC; (2) behavioral indices of each subscales; (3) methods of testing validation for BOC using VR; and (4) analysis of BOC with tests and CEI data.

The primary responsibility of the BOC, however, is the staff's who is also responsible for testing its reliability and using it to rate behaviors on VR's. The Co-Principal Investigators will share in the responsibility for the preliminary and final construction of this instrument. After VR data has been completed, the BOC will be employed to obtain indices of observed behaviors.

Data Analysis

Two types of analysis are anticipated: (1) analysis of data as related to original objectives of the study, and (2) post-hoc analysis of data based upon (a) an examination of relationships between variables that will require further analysis beyond the original objectives and (b) an examination of the relationship between cognitive and personality development, as related to observed behaviors. The latter was not included as an objective of the study. Originally the Stanford-Binet was employed as a devise for screening subjects, but from examining data of four-year-olds, it appears that covariation of personality variables with other factors, e.g., sex, SES, family structure, etc., is highly probable. In an effort not to over-look I.Q. as a possible covariant, we have decided to administer I.Q. to five-year-olds, which will also allow the examination of behavioral-personality changes as a function of cognitive development.

As indicated in the original proposal, analysis will involve examining the effects of sex of the child, family background factors (SES, family structure, religious orientation), and ecological influences on tests scores and behavioral ratings. If any of these prove significant, they will be used as predictors in a multiple regression equation. Both tests scores and behaviors will be considered criterion variables. I.Q. will be examined both as a criterion variable with family and ecological factors, and as a predictor with test and behavioral variables. Intercorrelations of all variables will be obtained, with multiple and path analysis performed where such relationships seems possible. Additionally, analysis of difference in characteristics of high and low scores on tests according to t-tests for means and proportions, and correlations of pairs of variables within groups will be made.

Curriculum Development

The results of the project will be employed to develop a pilot curriculum which could be employed in effecting a more positive transition from black ecological settings to the dominant setting. In part, such a curriculum will attempt to employ a different strategy of intervening between actual behaviors and "desired" outcomes. Rather than attempting to change the behaviors of Black children into "white behaviors," the aim will be to increase general effectiveness in other settings without destroying their behavior.

The projected time schedule for the above goals is included in Table 8.

Table 8

Projected Time Schedule for Year III

```
                      July, August, Sept. Oct.Nov. Dec. Jan. Feb. Mar. Apr. May. June

Data collection
 5 yr. old testing,VR-------------------------------->
 CEI questionnaire   ------------------------------------------>
BOC
 Development, validation and testing ---------->
Data Analysis and Synthesis
 Test                                              ---------------------->
 CEI                                               ---------------------->
 BOC                                           -------------------------->
 Day Care Data                             ----------->
Curriculum Development                                            ----------->
Final Report                                                               ------->
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Debriefing

Federal guidelines will be followed pertaining to human subjects, as well as those developed by the American Psychological Association's Committee on Ethnical Standards in Psychological Research (1973). Additionally, it is felt that the nature of data collection on video records requires additional caution, especially since other investigators will be requesting use of such data. In debriefing parents, the possible use of the data by other investigators will be explained, and will be requested that they sign an additional waiver for such purposes. It is felt that this is necessary given the potential abuse of such data, e.g., VR data being given to third party investigators.

It is hoped and expected that parents will cooperate with researcher in this area for such records are invaluable resources.

Final Report and Dissemination

As is the responsibility of this project, a final report will be prepared and summitted to the Office of Child Development (DHEW). Additional reports and papers will be prepared and submitted for publications and presentations at professional meetings. Additionally, availabilty of the project's findings will be announced to ERIC, as well as other scientific information clearinghouses, and will be sent upon request to interested individuals. It is believed that the outcome of the study is particularly pertinent to preschool programs, researchers in early child development, early childhood training programs and federal, state and local agencies concerned with early childhood intervention programs. Finally it is anticipated that a manuscript based upon the project's findings will be prepared as either a monograph series or a book.

As part of the debriefing meeting for participating day care programs, information on curriculum material will be provided to all the centers, and assistance will be provided upon request to potential users. Naturally, an attempt will be made to evaluate such uses. Furthermore, a conference of investigators involved in child development research will be held at Meharry, and convened by the Principal Investigators. The purpose of the invitational conference will be to share information relative to the objectives and interests of this study. Presently, the senior staff are making plans to present future findings at conferences of early childhood and other professional organizations, such as the National Council for Black Child

Development, National Associaton for the Education of Young Children, Black Child Development Institute, National Association of Black Psychologists, and the American Psychological Association.

G. Comparability

The reports prepared by the Social Research Group (Lindsey, Note 5; Hurt and Lindsey, Note 6) which attempted to identify areas of comparability of research projects funded by the Office of Child Development have been examined. Development instruments in this project are not being employed in other projects on the family, with the exception of Hardy (90-C-572) who is using the Stanford-Binet Intelligence Scale to test 11-year-olds. However the present sample consists of 4-5 year olds, which makes comparability of I.Q. of little value. On the other hand, instruments which are being developed by a number of projects have potentials for comparing results on certain variables across samples with data collected with the CEI (See Table 9). Although the situation is far from ideal, it is felt that compensating possibilities are offered, in that a number of related variables are being measured, undoubtely, with varying constructs, e.g., attitude toward child rearing, descipline, family social organization, socialization practices, etc. It is possible that the variables that are being measured share satisfactory validity to the extent that they can be compared. Further, projects have been identified which include families with children in the appropriate age range. Projects with families that differ from this study have also been included. For example, it would be worthwhile to see the extent in which white middle class working mothers differ in childrearing attitudes from black middle and lower class mother (see Grow, OCD-CB-456). Attempts will be made to obtain copies of other

Table 9

Family Studies with Potentials for Limited Comparability of Related Variables with Project 90-C-259

Project	Age	Race	SES	Instrument	Variables
Nobles (90-C-255)	(Families)[a]	Black	Low & Middle	Black Family System Interview[b]	1. Social Organization (family-community connections). 2. Interpersonal relationship pattern a. Sibling relations b. Family-extended kin relations
Grow (OCD-CB-456)	(Mothers)[a]	White	Middle	Childrearing contingencies Questionnaire[b]	1. Household characteristics 2. Neighborhood housing 3. Care of the child 4. Childrearing attitudes 5. Childrearing practices 6. Amount of support from spouse or partner 7. Familial and community support
Rosser (90-C-258)	(Families)[a]	Black White	Low & Middle	Client Questionnaire[b]	1. Socio-cultural item clusters (e.g., role played by family members and the extent of social linkages) 2. Socialization practices (e.g., childrearing techniques & mother's affective relation with child)

[a] Parents with 4-5 year olds in family

[b] Developing Instrument

[c] Developed Instrument

Table 9 (continued)

Project	Age	Race	SES	Instruments	Variables
McAddo (90-C-631)	(Families	Black	Middle	Family Data Questionnaire[b]	1. Family structure 2. Family-friends-neighbors' reciprocity 3. Family interaction 4. Non-family interaction 5. Family mobility 6. SES of maternal & Paternal families over 3 generations
Hock (OCD-CB-490)	(Mothers)	Black White	Middle	A. Maternal Role Interview[b] B. Post Partum Interview[b]	A. Childrearing attitudes B. Childrearing attitudes
Alston (90-C-634)	(Parents-Teachers)[a]	Black White	Low Income (?)	Parent Reaction Scale[b].	Child descipline pattern
Schaefer (90-C-246)	(Parents-Teachers)[a]	Black White	(?)	Schefer Parent Interview[b]	1. Family characteristics 2. Parent characteristics 3. Parent involvement with child
Silcott (OCD-CB-499)	4-5	Black White	Low & Middle	Self-Concept and motivation Inventory[c]	Self-Concept

[a] Parents with 4-5 year olds in family

[b] Developing Instrument

[c] Developed Instrument

developing instruments, as well as share ours. This will allow the opportunity to compare related items. It is not suprising if such items are highly similar, since various questionnaire's items designed to measure similar constructs are usually first identified on the basis of face validity. Finally, communication will be made with Silcott (OCD-CB-449) who has a sample of 4-5 year old black and white children from lower and middle SES backgrounds. He is using a developed instrument to measure self concept which differs from the one being used in this study. It is realized, however, that comparision, involving different instruments has certain pitfalls, Nevertheless, the relationship of his independent variables, namely, sex, SES and race, to self-concept would be interesting.

Hopefully, evaluation of many of the instruments now being employed by various projects could be assessed, and recommendations concerning their use can be made to future investigators. Hopefully, OCD would be cautious in not discouraging innovation for the sake of uniformity. With proper guidelines for new research projects, this should not prove to be a significant problem.

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APPENDIX A

Working Paper On

Social Status and Black Americans

WORKING PAPER
Social Status and Black Americans*

Arthur L. Mathis

Social class status is a widely employed variable in social science research. It has been used primarily for classifying individuals into categories above or below one another on some scale of inferiority and superiority, which denotes one's position of social and economic prestige and/or power. The most noted conceptual framewotk for measuring social class is Weber's (1946) triad of prestige, wealth, and power.

A myriad of standardized and ad hoc social class measures has been developed which focus upon all or a portion of Weber's triad. The most popular type of measure for social class is based upon occupation (scaled to reflect prestige). Others consist of single variables such as education, income, or possessions. A number of multiple indexes also exists. It has been questioned whether such measures can be applied equally in an oppressive, pluralistic, and fluid society, such as the United States. This is especially critical since most measures of social class status were developed with whites, and there is little convincing evidence that they accurately measure social class for Blacks. The purpose of this paper is to examine the utility of social class as a measure of social stratification for Blacks.

To begin with, we recognize that social differences within human groups are universal and natural occurring phenomena. All societies, in one way or another, accept and accord different levels of deference to its members. The fundamental foundation for all group life is the degree in which its members interact with one another, which results in both social intergration (homogeneity) and social differentiation (heterogeneity). The former is a tendency toward (more or less) mutual attraction, dependence, and compatibility; and the latter is a tendency toward the development of social as opposed to biological differences among groups (Svalastogo, 1965). Classification of biological differences (e.g., race, sex, age, etc.), to a certain extent, is less ambiguous than classification os social differences (e.g., education, income, religion, politics). This is especially the case for social class.

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A number of methods have been devised for classifying people into social classes. Many would argue that occupation, according to factor analyses, has been shown to be the single best indicator of social class. Hollingshead (1957) and Duncan (in Reiss, 1961) provide useful procedures for assessing this variable. A popular multiple index was developed by Hollingshead and Redlich (1958), using occupation and education as an index of socioeconomic status. Another widely used index of social class is Warner's Index of Status Characteristics, which consists of four factors: Occupation, Income Source, House Type, and Dwelling Area (Warner, et. a., 1949). Source of income represents an interesting innovation, and includes: (1) inherited wealth (rank highest), (2) earned wealth, (3) profits and fees, (4) salary, (5) wages, (6) private relief, and (7) public relief and "non-respectable" income (rank lowest). Warner, et. al., (1949) report a high correlation between amount of income and source of income. However, source of income was less closely related to occupation and more closely to education than was amount of income. A similar three-component index based upon area lived in (residence), occupation, and education was developed by Hollingshead (Hollingshead and Redlich, 1958). The inclusion of education is seen as an advantage over the Warner's index (Gordon, 1958).

Other indexes for measuring social class includes Edwards' (1934) Social-Economic Grouping of Occupations, Hatt-North's (1947) Occupational Prestige Ratings, and the United States Bureau of the Census' (1963) Socioeconomic Status Scores. The Edwards' social-grouping has been used by the U.S. Census for comparing general occupational mobility and trends. The index has often been criticized for the lack of homogeneity of its categories and the weak scale properties of hierarchical grouping (Miller, 1970). The Hatt-North Occupational Prestige Ratings use subjective rankings, but nonetheless, many researchers feel that they are highly valid because they represent a composite of factors and higher predictive power can be attained (Miller, 1970). O. D. Duncan has extended the Hatt-North index to include all occupations listed by the U. S. Bureau of Census (Reiss, 1961). Finally, the U. S. Census socioeconomic status scores have limited absolute meaning. They were primarily designed for comparing different areas of population subgroups or where socioeconomic status is needed as a control in studying other relationships. The score is obtain by combing data on occupation, education, and family income. These measures, like those above, rely heavily upon what has come to be known as traditional measures of social class, namely, occupation, education, and income. These variables have been criticized as being unreliable and invalid indicators of black social class status.

A number of investigators, among them Drake (1965) and Jencks (1972), have demonstrated that education and income are less related than expected for Blacks than for Whites. It has been shown that Blacks are more frequently under employed, in that they often have more education (training) or skills than their job requires. Consequently, they receive salaries and wages disproportionate to their training. Since an underemployed Black person has a lower income than a White person with equivalent years of education, the former will not be able to afford the same standard of living as his White counterpart. This lower standard of living requires that the Black person adopt a different life style than his status, as measured by his education, would indicate.

Similarly, occupation tend not to indicate the same status for Blacks as for Whites (Fein, 1965). For example, the owner of a small business in a White shopping area might not have nearly the same income as the owner of the same business located in a Black shopping area. However, according to the occupation categories of the Hollingshead-Redlich's Scale, both persons would be designated middle-income. Another problem with occupational ranking is that disparities exist within occupations as well as between them.

Jencks (1972) obserbes that one limitation on the definition of occupational status is that it refers only to occupations, not to the specific jobs within them. Accordingly, some jobs are much more attractive and rewarding than others, even though they are classified together in a single occupation. Jencks raises the following questions in this regard: (1) To what extent does the prestige of a particular job depends upon its unique attributes? and (2) To what extent does the prestige of the job depends on the occupation with which it is associated? (Jencks, 1972, p. 178).

On the other hand, there appears to be considerable agreement concerning the ranks of occupations throughout the American Society. This consistency has been noted for Whites, Blacks, old, young, southerners, northerners, urban, rural, rich, poor educated, and uneducated (Reiss, 1961). Over the last several decades, Americans have rated occupations in much the same way. However, different individuals often disagree quite sharply about the status of particular occupations. According to Jencks (1972), the consensus about the occupations's prestige derives largely from two factors:

(1) Most people rank an occupation high if it attracts highly educated workers.

(2) Most people rank an occupation high if it pays well.

A possible third determinant, although less significant statistically than either education or income, is that people's judgements about occupation also seem to be negatively influence by the percentages of Blacks and women in it.

Billingsley's (1968) assertion, that the indicators of social class which have been developed in social science research are relatively more reliable when used for White ethnic groups than when used unmodified with Black groups, has never been adequately refuted. Billingsley (1968) believes that such indicators have resulted in an over-estimation of the number of lower class Blacks, and that this obscures rather than clarifies much of the variety of status and behavior of that group. Although he accepts the utility of social class, he feels that current measures are mostly indicators of economic and social positions in the wider community. He does not believe that they provide accurate descriptions of who associates with whom and why.

Finally, it should be pointed out that social class status depends primarily upon the manner in which an individual or individuals are held in esteem by their fellow group members. Social class status depends, therefore, upon the cultural values of the group. Deference is awarded according to what the group cherishes as being noble or worthy. Hence, status could be based upon such characteristics as age, wisdom, heredity, or economic power. Young (1970), Nobles (1974), and a number of other investigators have argued that Blacks are culturally different from their White American counterparts. The extent that they possess different values as to what is worthy in an individual determines their orientation to their family, their community, and the wider community. Cultural relativity is an important, yet complicated, factor when comparing heterogenous groups within the same social structure. Although it appears logical to assume that different ethnic groups within the same society can be compared using the same social class criterion, this does not seem to be the case empirically, at least in the United States. This problem has been highlighted by the negative relationship reported between socioeconomic scores for ~~non~~-White persons in the 1960 U.S. Census (U.S. Bureau of the Census, 1967). The assumption that status is perceived the same in White and Black communities is seemingly quire erronerous. In addition to what have been stated above, it is questionable whether occupational prestige among Blacks is as important as material symbols, e.g., automobile, clothes, homes, etc. (Dobson, 1975). It is possible that Blacks might even place greater emphasis upon material possessions than for example, education or source of income. It seems that as a result of past discrimination in educational and occupational opportunities Blacks have come to value, if anything, income (regardless of source) as an important indicator of one's worth or success in life.

We concur with Billingsley (1968) that the importance of social class is that the higher the social class status of an individual the greater will be the individual's ability to survive with dignity in an hostile society. For an historically subjugated group, survival and dignity are invaluable social qualities. Furthermore, the extent in which Blacks can be compared with Whites, using similar social indicators, is dubious, given the nature of the historical experiences and relationship of the two groups. To ignore these fundamental realities in classifying them into common social classes is to commit a serious methodological oversight. Whether we are able to compare Black and White social classes in this day and time is irrelevant to the need for serious study of the Black community, as a viable social structure in itself. We still believe that Black and White comparisons can be made. Afterall, variables such as income, occupation, and education are still critical variables which indicate differences between the social and economic positions of the two groups within the American Society. As long as inferences are not made regarding social and psychological patterns between Blacks and Whites using such indicators, as if they were indeed adequate measures of social differentiation for both groups, we feel that the development of more valid instruments would be enhanced.

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APPENDIX B

Day Care Chart

Chart 1
Characteristics of Participanting Day Care Programs

DAY CARE CENTERS	NURSERY			ADVANCED NURSERY			KINDERGARDEN			Total
	No. of classes	No. of children	Ages	No. of classes	No. of children	Ages	No. of classes	No. of children	Age	No. of Children
A				CLOSED						
B	1	15	3	1	21	4	1	21	5	57
C	1	7	3-3½	1	8	4	1	11	5[b]	26
D	4	10[a] 10 7 6 33	2½-3	3	15[a] 14 14 43	4	1	16	5	85
E	1	9	2-3	1	12	3-4	1	14	4-5	35
F	1	21	Random	1	21	Random	1	21	Random	63
G	1	16	3	1	14	4	1	8	5	38
H	1	16	3-4	0	0	0	1	25	4-5	41

Note.

[a] White children or adults

[b] 2-6 year old children

Chart 1 (Continued)

DAY CARE CENTERS	Total No. of Children Tested	Total No. Remaining	No. of Non-black Students	No. of New Black Personnel	Day Care Personnel	No. of Testing Sities
A	4	CLOSED				
B	17	17	0	1[a] -Subsitute aid	-Lead Teacher -case worker -utility aide -Director (adm) -3 teachers -2 aides -driver	1
C	14	11	0	0	-Evening aide -Director (adm) -3 teachers	2
D	2	2	0	3[a] -soc. wker -teachers(2)	-Social wker -Director (adm) -driver & aid -Lead Teacher -8 teachers	1
E	8	8	0	4[a] Director Soc. wker 1 teacher 1 aide	-Director (adm) -Social worker -3 teacher -3 aides -driver	1
F	1	0	4	2[a] -teacher -aide	-Director-teacher -2 teachers -3 aides -driver	1
G	18	15	3	1[a] -teacher	-Director(adm) -4 teachers -M.H. technician -aide -driver	2

Chart 1 (Continued)

DAY CARE CENTERS	Total No. of Children Tested	Total No. Remaining	No. of Non-black Students	No. of New Black Personnel	Day Care Personnel	No. of Testing Sities
H	7	7	0	2 [a] -teacher -teacher asst.	-Director(adm) -2teacher -2 student teacher -teacher asst. -students	2

Note. [a] White children or adults